Appendix D

Key Federal Laws and Regulations

The Office of Civilian Radioactive Waste Management must comply with the requirements set forth in the Nuclear Waste Policy Act of 1982, as amended, as well as those mandated in other applicable laws. The Program must also comply with the regulations of other Federal agencies, including the Nuclear Regulatory Commission (NRC), the Department of Transportation (DOT), and the Environmental Protection Agency (EPA).

The Nuclear Waste Policy Act of 1982

The Nuclear Waste Policy Act of 1982 established basic policies for development of a Federal waste management system.

Development of geologic repositories. The Act established a framework for siting, characterizing, constructing, operating and monitoring, and closing two permanent geologic repositories for disposal of spent nuclear fuel and high-level radioactive waste.

Storage. It provided authority to contract for a limited amount of emergency Federal interim storage; that authority has expired. It also provided for development of a proposal to site and construct a monitored retrievable storage facility on a firm schedule.

Intergovernmental relations. It set requirements for interactions between the Federal Government and States, local governments, and Native American Tribes.

Other Federal responsibilities. It assigned responsibilities for nuclear waste management to specific Federal agencies.

Nuclear Waste Fund. It required that the owners and generators of wastes to be disposed of in a repository cover the costs of disposal, and it established a fund into which utilities operating nuclear power reactors pay fees on electricity generated and sold.

Office of Civilian Radioactive Waste Management. It established the Office within the Department of Energy.

The Nuclear Waste Policy Amendments Act of 1987

The Nuclear Waste Policy Amendments Act of 1987 retained the basic policies set forth in the 1982 Act regarding Federal responsibilities, the Nuclear Waste Fund, and the Office of Civilian Radioactive Waste Management. However it significantly modified the original Act.

Site characterization. The Amendments Act directed the Department to characterize only the Yucca Mountain site in Nevada as a potential repository site, and to postpone consideration of the need for a second repository until no sooner than the year 2007 and no later than 2010.

Monitored retrievable storage. It authorized the siting, construction, and operation of a monitored retrievable storage facility subject to certain conditions that link the construction and operation of the facility to construction and licensing of a repository. It also prohibited the siting of such a facility in a State in which a site has been approved for site characterization or repository construction.

State and Tribal involvement. It provided financial incentives for States and Native American Tribes on whose land a repository or monitored retrievable storage facility is sited. It authorized States, Native American Tribes, and units of local government within whose jurisdictions a candidate site is located to designate on-site oversight representatives, and it provided that the reasonable expenses of those representatives would be paid from the Nuclear Waste Fund.

It also authorized the Secretary to designate other units of local government as *affected* and therefore entitled to exercise oversight of site characterization activities and to receive financial assistance to cover the costs of that oversight.

External oversight. It increased external oversight of OCRWM's work by establishing the Nuclear Waste Technical Review Board.

Nuclear Waste Negotiator. It established the Office of the Nuclear Waste Negotiator to attempt to reach an agreement with a State or Native American Tribe willing to host a repository or monitored retrievable storage facility. These provisions have expired.

The Energy Policy Act of 1992

The Energy Policy Act of 1992 includes key elements of the National Energy Strategy proposed by the Administration in 1990. A number of provisions affect OCRWM.

Section 801 of the Act directed the Environmental Protection Agency to contract with the National Academy of Sciences to provide "findings and recommendations on reasonable standards for protection of the public health and safety" that would govern the long-term performance of a high-level radioactive waste repository at the Yucca Mountain site. Within 1 year of receiving the Academy's recommendations, the Environmental Protection Agency was to promulgate public health and safety standards that "shall prescribe the maximum annual effective dose equivalent to the individual members of the public from releases to the accessible environment from radioactive materials stored or disposed of in the repository." The Nuclear Regulatory Commission is also required to modify its technical requirements and criteria to be consistent with the Environmental Protection Agency's standards.

The Energy and Water Development Appropriations Act of 1996

The Energy and Water Development Appropriations Act of 1996 provided $400 million for the Program, $85 million of which was designated to be used only for the development of an interim storage facility and

only upon enactment of new statutory authority. Pending such authority, the Program was effectively reduced to a $315 million funding level, or one-half of the $630 million funding level anticipated for the continuation of OCRWM's 1994 program approach.

Congress recognized that the significant reduction in funding would require a more restricted repository program. The Conference Report accompanying the appropriations language provided the following guidance:

> The conferees agree on the importance of continuing existing scientific work at Yucca Mountain to determine the ultimate feasibility and licensability of the permanent repository at that site. The conferees direct the Department to refocus the repository program on completing the core scientific activities at Yucca Mountain. The Department should complete excavation of the necessary portions of the exploratory tunnel and the scientific tests needed to assess the performance of the repository. It should defer preparation and filing of a license application for the repository with the Nuclear Regulatory Commission until a later date. The Department's goal should be to collect the scientific information needed to determine the suitability of the Yucca Mountain site and to complete a conceptual design for the repository and waste package for later submission to the Nuclear Regulatory Commission.

The Energy and Water Development Appropriations Act of 1997

The Energy and Water Development Appropriations Act of 1997 provided $382 million for the Program, with specific guidance as follows:

> That no later than September 30, 1998, the Secretary shall provide to the President and to Congress a viability assessment of the Yucca Mountain site. The viability assessment shall include:
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> > (1) the preliminary design concept for the critical elements for the repository and waste package; (2) a total system performance assessment, based upon the design concept and the scientific data and analysis available by September 30, 1998, describing the probable behavior of the repository in the Yucca Mountain geological setting relative to the overall system performance standards; (3) a plan and cost estimate for the remaining work required to complete a license application; and (4) an estimate of the costs to construct and operate the repository in accordance with the design concept.

In accordance with this direction, 85 percent of the funding provided to OCRWM in the Fiscal Year 1997 appropriations was allocated to the Yucca Mountain Site Characterization Project to ensure the successful completion of the viability assessment. The remainder of the Fiscal Year 1997 appropriation was used to support OCRWM's Office of Waste Acceptance, Storage, and Transportation, and for program management, systems integration, and quality assurance activities.

The Energy and Water Development Appropriations Act of 1998

The Energy and Water Development Appropriations Act of 1998 provided $350 million for the Program, of which $190 million was made available through the Defense Nuclear Waste Disposal appropriation.

Specific funds were designated as follows:

> (1) $4 million was made available for the Nuclear Regulatory Commission to license a multi-purpose canister design; (2) $5 million was provided for affected units of local government; (3) $11.95 million was cut from the science program; (4) $16 million was cut from personnel costs, training and travel, cooperative agreements, support service contractors, and other activities not directly associated with site characterization and planning for interim storage.

The Act included no funds for the State of Nevada.

Key Regulations

Federal regulations are published in the Code of Federal Regulations, which is divided into volumes organized by Title and Part. For example, *10 CFR 60* refers to Title 10, Code of Federal Regulations, Part 60.

10 CFR 2 (NRC) Rules of Practice for Domestic Licensing Procedures and Issuance of Orders. Specifies the licensing process and requires an electronic record-keeping system to preserve data needed for licensing.

10 CFR 20 (NRC) Standards for Protection Against Radiation. Establishes standards for radiation safety at an NRC-licensed facility.

10 CFR 50, Appendix B (NRC) Quality Assurance Criteria for Nuclear Power Plant and Fuel Reprocessing Plants. Establishes quality assurance requirements.

10 CFR 60 (NRC) Disposal of High-Level Radioactive Wastes in Geologic Repositories. Sets forth technical requirements governing development of a permanent geologic repository for spent nuclear fuel and high-level radioactive waste. Includes NRC oversight and licensing duties.

10 CFR 71 (NRC) Packaging and Transportation of Radioactive Material. Implements Department of Transportation requirements for packaging and transporting spent nuclear fuel and high-level radioactive waste.

10 CFR 72 (NRC) Licensing Requirements for the Independent Storage of Spent Fuel and High-Level Radioactive Waste. Sets forth technical requirements for licensing private storage facilities to receive, transport, and store spent nuclear fuel, and outlines procedures by which the Department of Energy is licensed to receive, transport, and store spent nuclear fuel at a temporary facility.

10 CFR 73 (NRC) Physical Protection of Plants and Materials. Prescribes requirements for physical protection systems to protect against radiological sabotage of special nuclear materials.

10 CFR 74 (NRC) Material Control and Accounting of Special Nuclear Material. Establishes requirements for control and accounting of special nuclear material, including documentation of transfer of material.

10 CFR 75 (NRC) Safeguards on Nuclear Material—Implementation of US/IAEA Agreement. Establishes a system to implement the agreement between the U.S. and the International Atomic Energy Agency on the application of safeguards.

10 CFR 960 (DOE) General Guidelines for the Recommendation of Sites for Nuclear Waste Repositories. Promulgated to establish guidelines to compare candidate sites; used as the basis for the 1988 Site Characterization Plan for the Yucca Mountain Site Characterization Project.

10 CFR 961 (DOE) Standard Contract for Disposal of Spent Nuclear Fuel and/or High-Level Radioactive Waste. Outlines the Department's contract with utilities to receive, transport, and dispose of spent nuclear fuel and high-level waste.

40 CFR 191 (EPA) Environmental Radiation Protection Standards for Management and Disposal of Spent Nuclear Fuel, High-Level and Transuranic Radioactive Wastes. Originally issued in 1985 pursuant to the Nuclear Waste Policy Act, the regulations were remanded in 1987. The disposal section does not apply to Yucca Mountain. Pursuant to Section 801 of the Energy Policy Act of 1992, the Environmental Protection Agency is developing a site-specific radiation protection standard applicable to the Yucca Mountain site.

49 CFR 171-179 (DOT) Hazardous Materials Regulations. Specifies general Department of Transportation requirements for the transportation of radioactive materials.

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